

---

**CBSE TEST PAPER-04**  
**CLASS - IX Mathematics (Polynomials)**

---

1. The value of  $(102)^3$  is [ ]  
(a) 1061208 (b) 1001208  
(c) 1820058 (d) none of these
  2.  $(a-b)^3 + (b-c)^3 + (c-a)^3$  is equal to [ ]  
(a)  $3abc$  (b)  $3(a-b)(b-c)(c-a)$   
(c)  $3a^3b^3bc^3$  (d)  $[a-(b+c)]^3$
  3. The zeroes of the polynomial  $p(x) = x(x-2)(x+3)$  are [ ]  
(a) 0 (b) 0, 2, 3  
(c) 0, 2, -3 (d) none of these
  4. If  $(x+1)$  and  $(x-1)$  are factors of  $Px^3+x^2-2x+9$  then value of  $p$  and  $q$  are [ ]  
(a)  $p = -1, q = 2$  (b)  $p = 2, q = -1$   
(c)  $p = 2, q = 1$  (d)  $p = -2, q = -2$
  5. Factorise  $8a^3-b^3-12a^2b+6ab^2$  [ ]
  6. Evaluate  $(99)^3$  [ ]
  7. Find the value of  $k$ , if  $x-1$  is factor of  $P(x)$  and  $P(x) = 3x^2+kx+\sqrt{2}$  [ ]
  8. Expand  $\left[\frac{2}{3}x+1\right]^3$  [ ]
  9. Find the values of  $m$  and  $n$  so that the polynomial  $x^3-mx^2-13x+n$  has  $x-1$  and  $x+3$  as factors. [ ]
  10. Prove that  $x^2+6x+15$  has no zero. [ ]
  11. Factorise  $3(x+y)^2 - 5(x+y) + 2$  [ ]
  12. The volume of a cuboid is given by the expression  $3x^3-12x$ . find the possible expressions for its dimensions. [ ]
  13. Factorise  $x^6 + 8y^6 - z^6 + 6x^2y^2z^2$  [5]
-